

No. J-11015/372/2007-IA.II(M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhavan,
C.G.O. Complex, Lodi Road,
New Delhi-110 003,

Dated the 28th April, 2010

To

✓ M/s OCL India Limited
B-47, Connaught Place,
New Delhi-110 001
E-mail: ocl_delhi@ocl.in
datal@ocl.in

Subject: Expansion of Lanjiberna Limestone & Dolomite Mining Project of M/s OCL India Limited located in Village(s) Alanda, Bhabandh, Jhagarpur, Kesarmal, Raiberna, Katang, Dhauradha, Lanjiberna and Kukuda, Tehsil Rajgangpur, District Sundergarh, Orissa - environmental clearance regarding.

Sir,

This has reference to your letter No. 'Nil' dated 17.12.2009 and subsequent letters dated 08.02.2010 and 22.02.2010 on the subject mentioned above. The Ministry of Environment and Forests had earlier prescribed additional Terms of Reference (TORs) to the project on 31.07.2007 for incorporating in the already prepared EIA report. The proposal is for renewal of mine lease which fall due on 1st March, 2010 and enhancement of production of limestone from 1.7million tonnes per annum (Million TPA) to 4.2million TPA to meet the captive requirement of Cement Plant, which is located at a distance of about 9km from the mine. The project was earlier accorded environmental by the Ministry on 02.12.2005 for production of 1.7million TPA of limestone and 0.08million TPA of dolomite.

2. The total mine lease area of the project is 893.55ha, out of which surface rights have been acquired for an area of 333.43ha. Out of 333.43ha of surface right acquired area, 252.49ha is an agricultural land, 62.39ha is forestland and 18.55ha is wasteland. The remaining area of 560.12ha of mining lease for which surface rights have not been acquired as yet, comprises of 510.544ha of an agricultural land, 8.16ha of wasteland, 2.78ha of grazing land, 14.10ha of surface water bodies and 24.64ha is others. Area proposed for mining is 163.4ha, an area of 52.01ha is kept for waste dumps, 17.62ha for infrastructure, 4.86ha for roads, 95.54ha is undisturbed land and 560.12ha is others outside the surface right area within the lease for future exploration. The Sankha River is flowing in the buffer zone of the mine at a distance of 5km from the mine lease boundary. In addition, the Dolki Nallah, the Jharia Nallah and the Nakti Jhor are also located in the buffer zone of the mine at a distance

of 3km, 4.2km and 6km respectively from the mine lease boundary. No modification/ diversion in the existing natural drainage pattern at any stage have been envisaged.

3. No National Park/Wildlife Sanctuary/Biosphere Reserve/Tiger Reserve/Elephant Reserve etc. are reported to be located in the core and buffer zone of the mine and the area also does not report to form corridor for Schedule-I fauna. In support of this a location map duly authenticated by DFO cum Wildlife Warden, Sundergarh Division has been submitted alongwith a letter Memo No.490 4F/Misc/10 dated 25.01.2010. Nine Reserve Forests namely the Khatang RF(3km S), the Dahijira RF(3km W), the Tunmura RF(6.5km S), the Gudlali RF(7.5km S), the Jhandapahar RF(8.5km N), the Datani RF(9KM NW), the Luhuraberni RF(9km S), the Banglapahar RF (9km NW) and the Jhunmur RF(9.5km NE) are located in the buffer zone of the mine.

4. The mine working will be opencast by mechanized method involving drilling and blasting. The targetted production capacity of the mine is 42,00,000TPA(4.2million TPA) of limestone and the life of mine is 27years. The mineral limestone will be transported through the conveyor to the linked Cement Plant. The topography of the area is undulated at an elevation above mean sea level ranging from 220m to 240m. The ultimate working depth of mine will be 166m RL (99m bgl). The groundwater table varies between 0.92m -8.2m bgl during post-monsoon. The mine working will intersect the groundwater table. Hydro-geological study has been carried out and as per the report, the stage of groundwater development is 12.8% and the area is designated as safe zone. The Water requirement for the project is estimated 295m³ per day, out of which 266m³ per day will be obtained from the mine sump water and remaining 29 m³ per day from the dug well. It has been reported that nine (9) villages comprising a population of 22,544 people are in the cone zone; however, the proponent has informed that no additional land is to be acquired for the proposed expansion; therefore, there is no R&R issue envisaged. It has been reported that there is no topsoil and over burden; however, approximately 82510 m³ month of waste stone will be generated, which will be partly used for backfilling. It has been reported that 4.91million m³ of waste stone was generated till 1998, which was dumped externally. Thereafter, the waste generated from the mine is used for backfilling of the mined out area and will be continued in future till the end of mine life. It has been reported that there are 12 external dumps and the maximum projected height of the dumps is 24m. The dolomite generated along with limestone will be separately stored and sold after obtaining specific approval from the State Government. Plantation will be raised in an area of 185.83ha at the end of the mine life and an area of 125.12ha will be converted into water body during the post mining stage.

5. The State Pollution Control Board, Orissa granted consent to establish to the project on 19.05.2008 for enhancement of production of limestone from 1.7million TPA to 4.2million TPA with 1200TPH limestone crusher plant and 0.08million TPA production of dolomite over mine lease hold area of 893.55ha.

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6. The Ministry of Environment & Forests had granted exemption from public hearing as per para 7(III)(v) of EIA Notification, 2006 on 04.12. 2009 as it could not be conducted even after repeated attempts in January, 2008 and in June, 2009. The State Government of Orissa vide letter No. 1476/Env-I-38/2009/F&E dated 19.01.2010 informed that a Committee had been constituted under the Chairmanship of Sub- Collector, Sadar, Sundergarh to redress the grievances. The said Committee would meet bi-monthly. Besides, the Collector, Sundergarh hold weekly Grievance Redressal Cell at all the sub-divisional headquarters. The Indian Bureau of Mines had approved the scheme of mining alongwith progressive mine closure plan of the project on 07.05.2009 over an area of 893.55ha. The Ministry of Environment and Forests conveyed its approval under Section-2 of the Forest (Conservation) Act, 1980 for diversion of 62.39ha of forestland for renewal of mine lease on 19.07.1996. The capital cost of the project is Rs.7867Lakhs and the capital cost for the environmental protection measures is proposed as Rs.54Lakhs. The annual recurring cost towards the environmental protection measures is proposed as Rs.27.2Lakhs. The proponent has mentioned in the questionnaire that there is no court case to the project or related activity and stated that no directions have been passed against this project.

7. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and hereby accords environmental clearance under the provisions thereof to the above mentioned Lanjiberna Limestone & Dolomite Mining Project of M/s OCL India Limited for an annual production capacity of 42,00,000tonnes(4.2million tonnes) of limestone and 80,000tonnes (0.08million tonnes) of dolomite by the opencast mechanized method involving total mine lease area of 893.55ha, subject to implementation of the following conditions and environmental safeguards.

A. Specific Conditions

- (i) The project proponent shall obtain Consent to Operate from the State Pollution Control Board, Odisha and effectively implement all the conditions stipulated therein.
- (ii) The project proponent shall obtain fresh forestry clearance for diversion of 62.39ha of forestland for renewal of mine lease under Section-2 of the Forest (Conservation) Act, 1980. Environmental clearance is subject to grant of forestry clearance.
- (iii) The project proponent shall compensate and rehabilitate the land oustees and land losers/affected people, if any due to mining project as per the National Policy on Resettlement and Rehabilitation of project Affected Families (NPRR).
- (iv) The environmental clearance is subject to approval of the State Landuse Department, Government of Rajasthan for diversion of agricultural land for non-agricultural use.

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- (v) The project proponent shall develop fodder plots in the non-mineralised area in lieu of use of grazing land.
- (vi) The top soil, if any, shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.
- (vii) The waste generated during the mining operations shall be concurrently used for backfilling. The existing waste dumps shall be stabilized by plantation. The maximum height of the waste dumps shall not exceed 24m. Proper terracing of the waste dumps shall be carried out and the overall slope of the dumps shall be maintained to 28° . The waste dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dumps. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on six monthly basis.
- (viii) Catch drains and siltation ponds of appropriate size shall be constructed around the mine working and waste dumps to prevent run off of water and flow of sediments directly into the agricultural fields, the Sankha River, the Dolki Nallah, the Jharia Nallah, the Nakti Jhor and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after the monsoon and maintained properly.

Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and waste dumps to prevent run off of water and flow of sediments directly into the agricultural fields, the Sankha River, the Dolki Nallah, the Jharia Nallah, the Nakti Jhor and other water bodies and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.

- (ix) Dimension of the retaining wall at the toe of the waste dumps and the OB benches within the mine to check run-off and siltation shall be based on the rain fall data.
- (x) The void left unfilled in an area of 125.12ha shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out all along the excavated area.

- (xi) Plantation shall be raised in an area of 185.83ha including a 7.5m wide green belt by planting the native species in consultation with the local DFO/Agriculture Department in the safety zone around the mining lease, waste dumps, mine benches, around the water body, along the roads etc. The density of the trees should be around 2500 plants per hectare.
- (xii) Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as haul road, loading and unloading point and all transfer points. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (xiii) The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.
- (xiv) Regular monitoring of ground water level and quality shall be carried out in and around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Bhubneswar, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.
- (xv) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of groundwater required for the project.
- (xvi) Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.
- (xvii) Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.
- (xviii) Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.
- (xix) Drills shall either be operated with the dust extractors or equipped with water injection system.

- (xx) Mineral handling area shall be provided with adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (xxi) Sewage treatment plant shall be installed for the colony. ETP shall also be provided for the workshop and wastewater generated during the mining operation.
- (xxii) Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- (xxiii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xxiv) The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM₁₀) and NO_x in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.
- (xxv) A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.
- (xxvi) Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to the Ministry of Environment and Forests and its Regional Office, Bhubaneswar.

B. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral limestone and waste should be made.

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- (iii) Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department.
- (iv) Atleast four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM₁₀), SO₂ and NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- (v) Data on ambient air quality [(RSPM (Particulate matter with size less than 10micron i.e., PM₁₀), SO₂ and NO_x)] should be regularly submitted to the Ministry including its Regional office located at Bhubaneswar and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (vi) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- (vii) Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.
- (viii) Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.
- (ix) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

- (x) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (xi) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Bhubaneswar.

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- (xii) The project authorities should inform to the Regional Office located at Bhubaneswar regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- (xiii) The Regional Office of this Ministry located at Bhubaneswar shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (xiv) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, Its Regional Office Bhubneswar, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Bhubneswar, the respective Zonal Officer of Central Pollution Control Board and the State Pollution Control Board.
- (xv) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xvi) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.
- (xvii) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Office of the Ministry of Environment and Forests, Bhubneswar by e-mail.
- (xviii) The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution

Control Board and also at web site of the Ministry of Environment and Forests at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Bhubaneswar.

8. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
9. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.
10. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/ High Court of Orissa and any other Court of Law relating to the subject matter.
11. Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.


 28/11/2010
(SATISH C. GARKOTI)
Additional Director (S)

Copy to:

- (i) The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- (ii) The Secretary, Department of Environment, Government of Odisha, Secretariat, Bhubaneswar.
- (iii) The Secretary, Department of Mines and Geology, Government of Odisha, Secretariat, Bhubaneswar.
- (iv) The Secretary, Department of Forests, Government of Orissa, Secretariat, Bhubaneswar.
- (v) The Chief Wildlife Warden, Government of Odisha, Bhubaneswar.
- (vi) The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- (vii) The Chief Conservator of Forests, Regional Office (EZ), Ministry of Environment and Forests, A-3 Chandrashekharpur, Bhubaneswar-751023.

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- (viii) The Chairman, Odisha State Pollution Control Board, Parivesh Bhawan, A/118 Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012.
- (ix) The Member Secretary, Central Ground Water Authority, A2, W3 Curzon Road Barracks, K.G. Marg, New Delhi-110001.
- (x) The District Collector, Sundergarh District, Government of Odisha.
- (xi) EI Division, Ministry of Environment & Forests, EI Division, New Delhi.
- (xii) Monitoring File.
- (xiii) Guard File.
- (xiv) Record File.